

**Application Note – Calibrating Vision screen via program.**

**Calibrating a Vision screen via the program**

The screen calibration function can be called by turning on certain system bits in the program, this is useful when the screen calibration is so far out that the screen does not work. The procedure is:

Verify that the PLC is standalone (No I/O wiring) on your desk and without any protective cover on the touchscreen.

Make sure that the battery was inserted properly and see what is the status of SB8 (Battery low (1=low)). Check that the PLC is clean and also when it's OFF try to search any object (Dirt, Dust) between the behind the touchscreen.

Power ON, Touch the display and check the values SI 40, SI 41 - When the touch screen is not pressed, SI 40 and SI 41 equals -1:

ML	Memory Long	Op.	Addr.	Use		00	Format	Description
DW	Double Word	SI	39	<input type="checkbox"/>		0	DEC	
XB	X Bits	SI	40	<input checked="" type="checkbox"/>		-1	DEC	Touchscreen is being touched -X coordinates
XI	X Integer	SI	41	<input checked="" type="checkbox"/>		-1	DEC	Touchscreen is being touched-Y coordinates
XL	X Long	SI	42	<input type="checkbox"/>		255	DEC	
XDW	X Double Word	SI	43	<input type="checkbox"/>		15	DEC	
MF	Memory Float	SI	44	<input type="checkbox"/>		256	DEC	
SB	System Bits	SI	45	<input checked="" type="checkbox"/>		0	DEC	Numeric Key Entry Out of Limit - Counter of Attempts (Enhanced)
SI	System Integer	SI	46	<input checked="" type="checkbox"/>		100	DEC	Refresh HMI (units 10 msec), Buttons, Frame, Text (V570, V290-C)
SL	System Long							

If the values are not equal to -1, please clean the screen and remove the screen protector (if there is any).

SB 74 takes care to save calibration points to the EPROM. Please Try to calibrate the touchscreen using any stylus pen as follows:

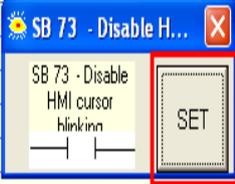
When the PLC is connected, go to on-line mode (F9), go to SB 74 and press on "set", SB 74 will rise to 1

T	Timers	SB	65	<input checked="" type="checkbox"/>		0	F8
MB	Memory Bits	SB	66	<input checked="" type="checkbox"/>		0	F9
MI	Memory Integer	SB	67	<input checked="" type="checkbox"/>		0	F10
ML	Memory Long	SB	68	<input checked="" type="checkbox"/>		0	F11
DW	Double Word	SB	69	<input checked="" type="checkbox"/>		0	F12
XB	X Bits	SB	70	<input checked="" type="checkbox"/>		0	F13
XI	X Integer	SB	71	<input checked="" type="checkbox"/>		0	F14
XL	X Long	SB	72	<input checked="" type="checkbox"/>		0	F15
XDW	X Double Word	SB	73	<input checked="" type="checkbox"/>		0	Disable HMI cursor blinking (Standard) Calibrate Touchscreen (touchscreen models)
MF	Memory Float	SB	74	<input type="checkbox"/>		1	
SB	System Bits	SB	75	<input checked="" type="checkbox"/>		0	Download Complete - PLC and HMI application



Now, go to SB 73 and press on "set", calibration cursor will appear in the PLC's display.

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MI	Memory Integer	SB	67	<input checked="" type="checkbox"/>		0	F10	
ML	Memory Long	SB	68	<input checked="" type="checkbox"/>		0	F11	
DW	Double Word	SB	69	<input checked="" type="checkbox"/>		0	F12	
XB	X Bits	SB	70	<input checked="" type="checkbox"/>		0	F13	
XI	X Integer	SB	71	<input checked="" type="checkbox"/>		0	F14	
XL	X Long	SB	72	<input checked="" type="checkbox"/>		0	F15	
XDW	X Double Word	SB	73	<input checked="" type="checkbox"/>		0	Disable HMI cursor blinking (Standard) Calibrate Touchscreen (touchscreen models)	
MF	Memory Float	SB	74	<input type="checkbox"/>		0		
SB	System Bits					1		

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